Topic 5: *Cognitive/Mental Status Assessment of Older Adults*

Competencies

1. Identify the importance of mental status assessment in older adults.
2. Define and identify the components of mental status assessment.
3. Assess mental status using validated tool—Folstein Mini-Mental Status Examination (MMSE)—identifying strengths and limitations of the tool.
4. Assess mood using validated tool—Yesavage Geriatric Depression Scale (GDS) and Cornell Depression Scale (CDS)—identifying strengths and limitations of the tools.

Topic 5: *Cognitive/Mental Status Assessment of Older Adults*

Content Outline

1. **Identify the importance of mental status assessment in older adults.**

   Cognitive impairment and psychiatric symptoms are relatively common in the elderly, with an estimated 4 to 5 million older adults experiencing cognitive disorders. Of community-residing elderly, 5% aged 65 to 75 and 25–30% aged > 85 evidence dementia, most commonly Alzheimer's disease. 60% of nursing home residents are demented.

   Mental status assessment screens for changes in cognition and mood, but does not provide a diagnosis of dementia.

   Quantified versions of mental status examination can be used to screen for cognitive and emotional disorders in older persons across a variety of settings.

   Measures of cognition provide systematic, standardized assessment and can be used to monitor older adults with cognitive impairments over time.

2. **Define and identify the components of mental status assessment.**

   Mental status assessment is designed to elicit cognitive abilities and deficits, emotional functioning, and basic intellectual functioning.

   Components of Mental Status Assessment:
   - Level of consciousness (alert, lethargic, coma).
   - Physical appearance (clothing, grooming).
   - Orientation to person, place, time.

- Speech and language.
- Emotional status.
- Memory—Ability to recall recent experiences.
- Attention and concentration—Ability to focus selectively on stimuli in the environment.
- Intelligence—Ability to respond to unknown situation.
- Judgment—Ability to compare or evaluate alternatives.
- Insight—Ability to see and understand connections between objects and situations.
- Construction—Ability to accurately reproduce simple objects.
- Comprehension.
- General information—Measurement of a person's contact with their environment.
- Perceptual disturbances (delusions/hallucinations).

3. Assess mental status using validated tool—Folstein Mini-Mental Status Examination (MMSE)—identifying strengths and limitations of the tool.

A. *MMSE*

1. *Purpose of MMSE:* To identify the presence of organic disease, to assess for changes in mental state, and to identify areas of cognitive disability.

Scores may indicate: 24–30 = No cognitive impairment 18–23 = Mild cognitive impairment 00 –17 = Severe cognitive impairment People who score below 23 should be referred for follow-up.

2. *Strengths of MMSE:*
   - MMSE is a valid, reliable screen for delirium and dementia, requiring 5 to 10 minutes to administer.
   - Can be administered by clinicians or lay persons specifically trained to conduct the assessment.
   - Assesses orientation, registration, attention and calculation, recall, language, reading, and obeying a simple command, and visual construction.
3. *Limitations of MMSE:*
   - Performance on the MMSE may be influenced by educational level.
   - Older persons may score lower due to advanced age. Areas of cognitive functioning that are not assessed: judgment, insight, remote memory.
   - Cannot be used for persons with severe sensory deficits or poor verbal ability.
   - Valuable for screening cognitive deficits, but does not provide a diagnosis.
   - Does not assess mood or perceptual disturbances.

4. Assess mood using validated tool—Yesavage Geriatric Depression Scale (GDS) and Cornell Depression Scale (CDS)—identifying strengths and limitations of each tool.

A. *Geriatric Depression Scale (GDS)*

1. *Purpose of the GDS:* To screen for depression in older adults.

Scoring: 0 - No depression, 30 - Very depressed; a score of 5 or more - refer patient for follow-up diagnosis.

2. *Strengths of the GDS:* Self-rated tool permits the client to answer yes or no, thereby overcoming the need for the client to make subtle discriminations in answering.

   Can be completed by client, no training required. (Self-rated scales generally thought to be very effective in screening minor depression.)
   - Short version (15 item) available for use (rather than full 30-item scale).
   - GDS can be used in screening the physically healthy as well as physically ill and cognitively impaired (MMSE > 15).

3. *Limitations of the GDS*
   - Cannot be used if client cannot self-report (limited in persons with severe depression and/or psychosis).
   - In the presence of cognitive impairment (MMSE < 15), reliability of scale is questionable.
   - GDS not able to differentiate between clinical diagnostic categories.
   - GDS is not as sensitive to changes in symptomotology over time as are observer-rated scales.

B. *Cornell Depression Scale (CDS)*

1. *Purpose of the Cornell Depression Scale:*

   A 20-question scale to screen for depression in older adults with dementia.

Scoring: 0 - No depression, 2 - Probable depression, 19 - Severe depression. Those patients with a score of 12 or above should be referred for follow-up diagnosis.

2. *Strength of the CDS:*

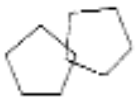
   Able to assess for depression in clients with advanced dementia (MMSE < 15).

3. *Limitation of the CDS:*
   - Requires clinicians to rate items.
   - Not a self-administered tool. Can be administered by a nurse assistant.
   - Takes slightly longer time to assess than GDS.

Instruments/Scales

Mini-Mental State Examination*

Maximum Score	Score	
		Orientation
5	( )	What is the (year) (season) (day) (month)?
5	( )	Where are we: (state) (county) (town) (hospital) (floor)
		Registration
3	( )	Name 3 unrelated objects, allow 1 second to say each. Then ask the patient to repeat all 3 after you have said them. Give 1 point for each correct answer. Repeat them until he learns all 3. Count trials and record.
		Trials:_____
		Attention and calculation
5	( )	Ask patient to count backwards from 100 by sevens. 1 point for each correct answer. Stop after 5 answers. Alternatively spell "world" backwards.
		Recall
3	( )	Ask patient to recall the 3 objects previously stated. Give 1 point for each correct.
		Language
9	( )	Show patient a wrist watch; ask patient what it is. Repeat for a pencil. (2 points). Ask patient to repeat the following: "No ifs, ands or buts" (1 point). Follow a 3-stage command: "Take a paper in your right hand, fold it in half, and put it on the floor" (3 points). Ask patient to read and obey the following sentence which you have written on a piece of paper. "Close your eyes" (1 point). Ask patient to write a sentence (1 point). Ask patient to copy a design (1 point).



___ Total Score

ASSESS level of consciousness along a continuum _____

Alert Drowsy Stupor Coma

(Continued)

*"Mini-Mental State:" A Practical Method for Grading the Cognitive State of Patients for the Clinician. *Journal of Psychiatric Research, 12*(3), 189–198. Used by permission.

Mini-Mental State Examination (Continued)

Instructions for Administration of Mini-Mental State Examination

Orientation

(1) Ask for the date. Then ask specifically for parts omitted. e.g., "Can you also tell me what season it is?" One point for each correct.

(2) Ask in turn "Can you tell me the name of this hospital?" (town, county, etc.). One point for each correct.

Registration

Ask the patient if you may test his memory. Then say the names of 3 unrelated objects, clearly and slowly, about one second for each. After you have said all 3, ask him to repeat them. This first repetition determines his score (0-3) but keep saying them until he can repeat all 3, up to 6 trials. If he does not eventually learn all 3, recall cannot be meaningfully tested.

Attention and calculation

Ask the patient to begin with 100 and count backwards by 7. Stop after 5 subtractions (93, 86, 79, 72, 65). Score the total number of correct answers. If the patient cannot or will not perform this task, ask him to spell the word "world" backwards. The score is the number of letters in correct order, e.g., dlrow = 5, dlorw = 3.

Recall

Ask the patient if he can recall the 3 words you previously asked him to remember. Score 0-3.

Language

Naming: Show the patient a wrist watch and ask him what it is. Repeat for pencil. Score 0-2.

Repetition: Ask the patient to repeat the sentence after you. Allow only one trial. Score 0 or 1.

3-Stage command: Give the patient a sheet of blank paper and repeat the command. Score 1 point for each part correctly executed.

Reading: On a blank piece of paper print the sentence "Close your eyes," in letters large enough for the patient to see clearly. Ask him to read it and do what it says. Score 1 point only if he actually closes his eyes.

Writing: Give the patient a blank piece of paper and ask him/her to write a sentence. Do not dictate a sentence, it is to be written spontaneously. The sentence must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary.

Copying: On a clean piece of paper, draw intersecting pentagons, each side about 1 in., and ask him to copy it exactly as it is. All 10 angles must be present and 2 must intersect to score 1 point. Ignore tremor and rotation.

Instruments/Scales

Short Form
Geriatric Depression Scale

NAME_____ AGE _____ SEX _____ DATE _____

WING _____ ROOM _____ PHYSICIAN _____ ASSESSOR _____

SCORING SYSTEM
Answers indicating depression are highlighted. Each BOLD-FACED answer counts one (1) point.

1. Are you basically satisfied with your life?	YES / **NO**
2. Have you dropped any of your activities and interests?	**YES** / NO
3. Do you feel that your life is empty?	**YES** / NO
4. Do you often get bored?	**YES** / NO
5. Are you in good spirits most of the time?	YES / **NO**
6. Are you afraid that something bad is going to happen to you?	**YES** / NO
7. Do you feel happy most of the time?	YES / **NO**
8. Do you often feel helpless?	**YES** / NO
9. Do you prefer to stay in your room/facility, rather than going out and doing new things?	**YES** / NO
10. Do you feel you have more problems with memory than most?	**YES** / NO
11 Do you think it is wonderful to be alive?	YES / **NO**
12. Do you feel worthless the way you are now?	**YES** / NO
13. Do you feel full of energy?	YES / **NO**
14. Do you feel that your situation is hopeless?	**YES** / NO
15. Do you think that most people are better off than you?	**YES** / NO

Score greater than 5 = Probable Depression **SCORE** _____

Notes/Current Medications: _____

_____

_____

(Continued)

Geriatric Depression Scale (Continued)

Instructions for use:
(Short Form Geriatric Depression Assessment Tool)

1. The same CNA caregiver should administer this test each time.
2. Choose a quiet place, preferably the same location each time the test is administered.
3. The administration of this test should not be immediately after some mental trauma or unsteady period.
4. Speak in a soft pleasant tone.
5. Answer all questions by circling the answer (yes or no) to the question.
6. Add the total number of **BOLD FACED** answers circled and record that number in the "SCORE" box.
7. Scores totaling five (5) points or more indicate probable depression.

A 30-item version of the GDS is also available. Address inquiries regarding this scale to:

Jerome A. Yesavage, M.D.
Director, Psychiatric ICU
Veterans Administration Medical Center
3801 Miranda Avenue
Palo Alto, CA 94304

Web site: www.stanford.edu/~yesavage.

Instruments/Scales

Cornell Scale
for Depression in Dementia

NAME _____ AGE ____ SEX ____ DATE _____

WING _____ ROOM _____ PHYSICIAN _____ ASSESSOR _____

Ratings should be based on symptoms and signs occurring during the week before interview. No score should be given if symptoms result from physical disability or illness.

SCORING SYSTEM
a = Unable to evaluate 0 = Absent 1 = Mild to intermittent 2 = Severe

a	0	1	2	
				A. MOOD-RELATED SIGNS
				1. Anxiety: anxious expression, rumination, worrying
				2. Sadness: sad expression, sad voice, tearfulness
				3. Lack of reaction to present events
				4. Irritability: annoyed, short tempered
				B. BEHAVIORAL DISTURBANCE
				5. Agitation: restlessness, hand wringing, hair pulling
				6. Retardation: slow movements, slow speech, slow reactions
				7. Multiple physical complaints (score 0 if gastrointestinal symptoms only)
				8. Loss of interest: less involved in usual activities (score only if change occurred acutely, i.e., in less than one month)
				C. PHYSICAL SIGNS
				9. Appetite loss: eating less than usual
				10. Weight loss (score 2 if greater than 5 pounds in one month)
				11. Lack of energy: fatigues easily, unable to sustain activities
				D. CYCLIC FUNCTIONS
				12. Diurnal variation of mood: symptoms worse in the morning
				13. Difficulty falling asleep: later than usual for this individual
				14. Multiple awakening during sleep
				15. Early morning awakening: earlier than usual for this individual
				E. IDEATIONAL DISTURBANCE
				16. Suicidal: feels life is not worth living
				17. Poor self-esteem: self-blame, self-depreciation, feelings of failure
				18. Pessimism: anticipation of the worst
				19. Mood congruent delusions: delusions of poverty, illness or loss

SCORE _____ Score greater than 12 = Probable Depression

Notes/Current Medications: _____

(Continued)

Cornell Scale (Continued)

Instructions for use:
(Cornell Dementia Depression Assessment Tool)

1. The same CNA (certified nursing assistant) should conduct the interview each time to assure consistency in response.
2. The assessment should be based on the patient's normal weekly routine.
3. If uncertain of answers, questioning other caregivers may further define the answer.
4. Answer all questions by placing a check in the column under the appropriately numbered answer. (a = unable to evaluate, 0 = absent, 1 = mild to intermittent, 2 = severe).
5. Add the total score for all numbers checked for each question.
6. Place the total score in the "SCORE" box and record any subjective observation notes in the "NOTES/CURRENT MEDICATIONS" section.
7. Scores totaling twelve (12) points or more indicate probable depression.

Clinical Practice Guideline, 1996, American Medical Directors Association. Used by permission from George S. Alexopoulos, MD.

Topic 5: *Cognitive/Mental Status Assessment of Older Adults*

Case Study

Ms. P is a 69-year-old woman who has been known in the community as a leader in nursing care and executive director of a successful home care agency. Following her surprise retirement, Ms. P. is seen in the hospital's Geriatric Assessment Clinic with her two daughters, for an evaluation. Ms. P lives alone and has been widowed for 23 years.

Ms. P denies having any problems aside from some arthritis. When asked about her early retirement, she says that she was tired from all the stress related to the changing health care system. "It was getting to be too much for me!"

Ms. P's two daughters ask if they could speak with you about their mother. Ms. P agreed, commenting that her daughters were worried about nothing. The daughters said that they were concerned that their mother wasn't like her old self. She took less interest in her work during the six months prior to her retirement. They recalled that only a year ago their mother had said that she would never retire and now she seemed relieved. At home she wasn't interested in keeping the house organized, something she always took pride in. She even missed a lunch date with her granddaughter last week, saying she forgot.

Experiential Activities/ Clinical Experiences

A. *Case Study Questions:* Based on the case of Ms. P, a physical exam was done with no abnormal findings.

1. What other testing would you suggest? Why?
2. How would it feel to evaluate someone who has been a role model in the community? Another nurse? Someone who thinks nothing is wrong?

B. *Video:* "Cognitive Assessment" from the series *Caring for the Cognitively Impaired Patient* by the University of Kentucky Alzheimer's Disease Center

C. *Role Play:* Use the MMSE with one other. This will not only help to familiarize you with the mental status tool but also allow you to understand the anxiety patients experience when tested. This can be done by asking two students to role-play the testing and then allow for comments and discussion from the class. Following this demonstration, divide into groups of three. One student will be the observer and cue the participants. For example, the observer might notice that the tester is giving hints to the testee. Provide time for each student to play each role in the exercise.

Topic 5: *Cognitive/Mental Status Assessment of Older Adults*

Evaluation Strategies

A. *Questions:*

What is included in an evaluation of a person's mental status?

What is the purpose of using a validated tool for assessment of a person's mental status?

What does a score of 16 on Folstein's MMSE tell you?

On the MMSE, when a person is unable to recall three objects after a few minutes, what suggestion would you make to aid in memory functioning?

B. *Clinical Evaluation:*

Include an evaluation of a patient's mental status during a clinical rotation with older adults. Nursing homes and Alzheimer's units, in particular, provide a good opportunity.

Topic 5: *Cognitive/Mental Status Assessment of Older Adults*

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